

REMARKS

In response to the office action dated April 5, 2006, Applicant amended claims 1, 11, 36-43, 59, 63, 67, 75-77, 80, and 82, and cancelled claims 50 and 51. Claims 1-7, 9-11, 13-29, 36-49, and 52-82 are presented for examination.

The Examiner objected to claims 1, 36-43, 59, 63, and 75-77. Applicant amended these claims to obviate this objection, so the objection should be withdrawn.

The Examiner rejected claim 11 under 35 U.S.C. §112, 2nd paragraph. Applicant amended this claim to obviate this rejection, so the rejection should be withdrawn.

The Examiner rejected claims 1, 59, 63, and 80 under 35 U.S.C. §112, 2nd paragraph. Specifically, the Examiner stated that “the phrase ‘one of the first and second comonomers is selected from the group consisting of’ (emphasis added) is indefinite since it is not clear whether or not both first and second comonomers are selected from the subsequently recited Markush group.” Applicant would like to point out that the phrase quoted by the Examiner requires that only one, not both, of the first and second comonomers is selected from the subsequently recited Markush group. The other of the first and second comonomers is not limited to any particular monomer. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

The Examiner rejected claims 13-29, 64-67, and 78 under 35 U.S.C. §112, 2nd paragraph. Specifically, the Examiner stated that “the scope of the[se] claims is indefinite since it appears that the defined comonomer of claim 1 is broadened in scope by claims 13-29. Specifically, comonomers 2-A and 2-B [recited in claim 13] can be comonomers other than those defined in claim 1.” Applicant disagrees. Claim 1 requires that one of the first and second comonomers is selected from the nine specific monomers recited in a Markush group. Accordingly, one skilled in the art would understand that only one of comonomers 2-A and 2-B recited in claim 13 (which depend from claim 1) is selected from those specific monomers and the other of comonomers 2-A and 2-B is not limited to any particular monomers. Thus, the scope of claim 1 is not broadened by claim 13, as well as claims 14-29 dependent from claim 13. For the same reason, claims 64-67 and 78 do not broaden claim 63, from which claims 64-67 and 78 depend. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

The Examiner rejected claims 1-7, 9-11, 13-15, 25-29, 44-50, 52-55, 57-66, 68, 69, 74, and 78-80 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over Lee et al, U.S. Patent 5,395,919 ("Lee").¹

As amended, claims 1-7, 9-11, 13-15, 25-29, 44-49, 52-55, 57-66, 68, 69, 74, and 78-80 cover blends consisting essentially of first and second PHAs. The second PHA is prepared from two different comonomers. Lee describes that poly(3-hydroxybutyrate) (i.e., a first PHA) can be blended with a PHA (i.e., a second PHA). See column 9, lines 43-48. However, the PHA described in Lee includes at least 11 different comonomers. See Table 1. Lee does not disclose or suggest a PHA prepared from only two different comonomers. Thus, amended claims 1-7, 9-11, 13-15, 25-29, 44-49, 52-55, 57-66, 68, 69, 74, and 78-80 are not anticipated or rendered obvious by Lee. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

The Examiner rejected claims 1-7, 9, 13, 14, 36, 44-49, 52-56, 58-64, 75, and 78-81 under 35 U.S.C. §102(e) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over Noda et al, U.S. Patent 6,808,795 ("Noda"). The Examiner also rejected claims 1-7, 9, 13, 14, 20-29, 36-50, 52-56, 58-64, and 75-82 under 35 U.S.C. §103(a) as being obvious over Noda.¹

As amended, claims 1-7, 9, 13, 14, 20-29, 36-49, 52-56, 58-64, and 75-81 cover blends consisting essentially of a first PHA that includes 3-hydroxybutyrate and a second PHA that includes 4-hydroxybutyrate, 3-hydroxypropionate, 4-hydroxyvalerate, 6-hydroxyhexanoate, 6-hydroxyhexanoate, 3-hydroxyhexanoate, 3-hydroxyoctanoate, 3-hydroxydecanoate, 3-hydroxydodecanoate, or 3-hydroxydodecenoate. Noda describes a blend containing a first PHA, a polylactic acid (i.e., a poly(2-hydroxypropanoate)), and optionally a second PHA. See, e.g., the abstract and claims 1 and 3 of Noda. However, Noda does not disclose or suggest a blend consisting essentially of a first PHA that includes 3-hydroxybutyrate and a second PHA that includes the above-mentioned monomers. Thus, amended claims 1-7, 9, 13, 14, 20-29, 36-49, 52-56, 58-64, and 75-81 are not anticipated or rendered obvious by Noda.

¹ Applicant cancelled claim 50, so the rejection of this claim should be withdrawn.

Claim 82 covers blends consisting essentially of a first PHA that includes 3-hydroxybutyrate and a second PHA that includes poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate) or poly(3-hydroxybutyrate-co-3-hydroxyhexanoate-co-3-hydroxyoctanoate-co-3-hydroxydecanoate-co-3-hydroxydodecanoate-co-3-hydroxydodecenoate). Noda does not disclose or suggest a blend consisting essentially of a first PHA that includes 3-hydroxybutyrate and a second PHA that includes a terpolymer or a hexapolymer. Thus, amended claim 82 is not anticipated or rendered obvious by Noda.

Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

The Examiner rejected claims 1-37, 44-73, and 78-82 under 35 U.S.C. §103(a) as being obvious over Hammond, U.S. Patent 5,646,217 ("Hammond").²

As amended, claims 1-37, 44-49, 52-73, and 78-82 cover blends consisting essentially of first and second PHAs. In other words, the two PHAs are the only active ingredients that imparts the properties recited in independent claims 1, 59, 63, 80, and 82. Hammond describes a polymer blend containing a first PHA, optionally a second PHA, and a transesterification catalyst. See, e.g., the Abstract. The transesterification catalyst can "maintain or increase the molecular weight of polyester or blend of polyesters or to increase the resulting melt viscosity of blends of polyesters whose individual components have widely differing melt viscosities." See column 1, lines 14-18. Given that the transesterification catalyst modifies the molecular weight or viscosity of the PHAs, the blends described in Hammond contain at least three active ingredients. Hammond does not disclose or suggest blends consisting essentially of two PHAs. Thus, amended claims 1-37, 44-49, 52-73, and 78-82 are not anticipated or rendered obvious by Hammond. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

Applicant believes that the application is now in condition for allowance, which action is requested.

² Applicant cancelled claims 50 and 51, so the rejection of these two claims should be withdrawn.


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Enclosed is a check for the Petition for Extension of Time fee. Please apply any other charges to deposit account 06-1050, referencing Attorney's Docket No. 14074-014001.

Respectfully submitted,

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